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10/553,352	08/02/2006	Toyoshi Tokimoto	1248-0824PUS1	1209

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EXAMINER	
SHERMAN, STEPHEN G	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/553,352	TOKIMOTO, TOYOSHI	
	Examiner	Art Unit	
	STEPHEN G. SHERMAN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/14/2005; 2/1/2006; 8/28/2007; 7/11/2008; 7/11/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because of undue length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 24-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 24-25 describe a program, which is considered a data structure. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing a functional change in the computer. See, e.g. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable

medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. The preamble of the claim should describe a computer readable medium encoded with a computer program, the computer program containing a set of instructions that when executed by a computer, cause the computer to carry out the method described by the body of the claim.

Claim 26 recites "computer readable recording medium" where in the specification, at page 42, lines 14-20 it is explained that the recording medium carrying the program can be "in a flowing manner as in the downloading of a program", i.e. a signal. Signals are non-statutory subject matter as they do not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter). For this reason, claim 26 is non-statutory as the term "computer readable recording medium" in the claim could be a signal.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma (US 6,384,868) in view of Maeda et al. (JP 2002-354064).

Regarding claim 1, Oguma discloses a display device that displays an image based on data supplied from a center device (Figure 17), the display device comprising:

receiving means for receiving data from the center device (Figure 17, 502); and

visual disturbance hiding means that hides disturbance in the image on account of image switching, when the display device obtains, via the receiving means, switching-related data indicating information with regard to the image switching of the image data by the center device, the switching-related data being transmitted in a case where the center device performs the image switching (Figure 17 and 18 and column 4, line 4 to column 5, line 32 explain that a mute signal is used which hides disturbance in the image on the account of image switching, i.e. switching the channel, when the receiver 502 receives a signal from the center device, i.e. remote control.).

Oguma fails to teach wherein the center device supplies image data to the display device.

Maeda et al. disclose of a display device that displays an image based on data supplied from a center device (Figures 1 and 2, the center device is 1 the display device is 2.).

Therefore, it would have been obvious to “one of ordinary skill" in the art at the time the invention was made to have a center device as taught by Maeda et al. to supply image data to the display device taught by Oguma in order to improve the quality of image reception/reproduction for the display device.

Regarding claim 2, Oguma and Maeda et al. disclose the display device as defined in claim 1, wherein, the switching-related data is transmitted when the center device completes the image switching (Figures 1 and 2 of Maeda in combination with Oguma will create that the image data and "switching related data" from the device 1 will be sent to the device 2 after the “image switching” is completed in the center device).

Regarding claim 3, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, a period during which the visual disturbance hiding means hides the disturbance is set in accordance with a delay time from receipt of the image data to display of the image (Figure 18 shows that the mute signal is

generated between the display of the two channels during which the delay occurs between the selection of channel 3 to channel 4.).

Regarding claim 4, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Maeda et al. also disclose wherein the image data is encoded data, the display device further comprising: decoding means that decodes the image data having been encoded (Figure 2, 25), a period during which the visual disturbance hiding means hides the disturbance being set in accordance with a period required for decoding the image data by the decoding means (In combination, since the display will hide the disturbance until the channel data is ready to be displayed, then it will be hidden "in accordance" with the decoding.).

Regarding claim 5, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, the visual disturbance hiding means starts to hide the disturbance when a delay time from receipt of the image data to display of the image elapses from a time point of acquiring the switching-related data (Figure 18 shows that the mute signal isn't generated until after a video signal CHA-4 is received until the channel selection period is started, i.e. acquiring switching related data.).

Regarding claim 6, Oguma and Maeda et al. disclose the display device as defined in claim 5.

Okada et al. also disclose wherein, the image data is encoded data, the display device further comprising:

decoding means for decoding the image data having been encoded (Figure 2, 25),

the visual disturbance hiding means starting to hide the disturbance when a certain time elapses from a time point of acquiring the switching-related data, the certain time being shorter than the delay time by a time required for decoding the image data by the decoding means (There is inherently some small delay that will occur between then the device receives the data and starts to hide the disturbance, i.e. nothing is instantaneous, and this minor delay will be smaller than the delay time.).

Regarding claim 7, this claim is rejected under the same rationale as claims 1 and 4, and furthermore Figure 18 of Oguma shows that the hiding means stops hiding the image, i.e. the mute signal ends, in accordance with the display device receiving the image data CHB-1, i.e. a “time stamp”, where this “time stamp” indicated the time related to encoding and decoding.

Regarding claim 8, Oguma and Maeda et al. disclose the display device as defined in claim 7.

Oguma also discloses wherein, a time when the visual disturbance hiding means stops hiding the disturbance is determined in accordance with (i) a time point of acquiring the first time stamp and (ii) a second time stamp indicating when the decoding means starts to decode the image data (As explained above the hiding of the visual disturbance is done between the selection of CHB-1 from CHA-4 and thus the hiding is stopped when CHB-1 is ready to display which means that the stopping is "in accordance" with the timing of the encoding and decoding.).

Regarding claim 9, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, the visual disturbance hiding means hides the disturbance of the image by stopping displaying the image (Figure 18).

Regarding claim 10, Oguma and Maeda et al. disclose the display device as defined in claim 1, further comprising:

transmission means for transmitting data to the center device; and switching command transmission control means for controlling and causing the transmission means to send, to the center device, switching demand data that demands switching of the image data (In combination the remote control in Oguma, i.e. the transmission means, will send data to the center device taught by Maeda et al.).

Regarding claim 11, this claim is rejected under the same rationale as claims 1 and 10, where Maeda et al. also disclose a transmission means fro transmitting data to the display device (Figure 2, 15).

Regarding claim 12, this claim is rejected under the same rationale as claim 2.

Regarding claim 13, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Maeda et al. further comprising encoding means (Figure 2, 11) for encoding the image data, the transmission means transmitting, to the display device, the image data encoded by the encoding means (Figure 2, 15).

Regarding claim 14, this claim is rejected under the same rationale as claims 7 and 8.

Regarding claim 15, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Maeda et a. disclose the center device further comprising:

receiving means for receiving data from the display device (Figure 2, 15);

switching demand acquiring means for acquiring, via the receiving means, switching demand data that demands switching of the image data (Figure 2, 13); and

image switching control means for controlling and causing the image switching means to switch the image data in accordance with the switching demand data obtained by the switching demand acquiring means (Figure 2, 12).

Regarding claim 16, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Oguma also discloses wherein, the image switching means is a tuner for selecting image data of being currently broadcast (Figure 17, 505).

Regarding claim 17, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Oguma also discloses wherein, the image switching means is a selector that selects one of sets of image data supplied from outside (Figure 16, 119).

Regarding claim 18, Oguma and Maeda et al. disclose in mage display system, wherein the center device defined in claim 11 sends the image data to the display device, and the display device displays an image based on the image data (Figures 1-2 of Maeda and Figures 16-18 of Oguma.).

Regarding claim 19, Oguma and Maeda et al. disclose the image display system as defined in claim 18, wherein, the display device is attachable to the center device (Inherently anything is “attachable” to anything, i.e. by using glue, tape, etc.).

Regarding claim 20, this claim is rejected under the same rationale as claim 1.

Regarding claim 21, this claim is rejected under the same rationale as claim 7.

Regarding claim 22, this claim is rejected under the same rationale as claim 11.

Regarding claim 23, this claim is rejected under the same rationale as claim 14.

Regarding claim 24, Oguma and Maeda et al. disclose a display device control program for operating the display device defined claim 1, the display device control program causing a computer to function as the receiving means, the visual disturbance hiding means, and the decoding means (If the elements defined above carry out the steps, then there is inherently program code to do so.).

Regarding claim 25, Oguma and Maeda et al. disclose a center device control program for operating the center device defined in claim 11, the center device control program causing a computer to function as the transmission means, the image switching means, the switching-related data transmission control means, the encoding means, the time stamp transmission control means, the switching demand acquiring means, and the image switching control means (If the elements defined above carry out the steps, then there is inherently program code to do so.).

Regarding claim 26, Oguma and Maeda et al. disclose a computer-readable recording medium storing either the display device control program defined in claim 24 and/or the center device control program (If the elements defined above carry out the steps, then there is inherently program code to do so, And since the system is physical, then the code is inherently stored on a recording medium.).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weber (US 6,296,549) discloses maintaining a televisor's necessitous channel 3 or 4 selection when used in conjunction with a cable box, VCR or other intermediate device is assured by concurrently sending a reiterative channel 3 (or channel 4) tuning command to the televisor whenever a program channel change command or other function signal is dispatched to the cable box, VCR or other television signal tuning apparatus.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN G. SHERMAN whose telephone number is (571)272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen G Sherman/
Examiner, Art Unit 2629

/Amr Awad/
Supervisory Patent Examiner, Art Unit 2629

8 May 2009